

“Riveting Reading”

**Civil Air Patrol
North Carolina Wing
Aircraft Maintenance**

Nov 1 '22 Vol #60

By Lt Col Martin ‘Stryker’ Heller



N179CP at ‘First Landing,’ Kill Devil Hills (KFFA)

To: NCWG Commanders, Operations Officers, Crew Chiefs & Aircrews;

1. Motivational Quote: *“CAP squadrons are like churches; each follow the same beliefs, guidance & rules, but the level of activity and success is mostly dependent on its members and its leaders. We’re all volunteers in this boat; everyone needs to pick up an oar (job) and row. Blessing us with your good looks and pilot skills isn’t enough.”*

1a. Caskets ‘2’; Gaskets ‘0’: A brutal but stark reminder that we are in a serious occupation, both pilots and mechanics alike. In late August, a nearby (non-CAP) accident claimed the lives of two experienced pilots. After engine failure, within minutes of departure, they were unable to land safely. NTSB blames the engine failure on maintenance failing to install a gasket on engine accessory port. For your own sakes, please take a little more time on preflight after maintenance, flying higher altitudes when able, and spend more time looking out the window for possible emergency fields. Not sure any of this would have changed their outcome, but luck favors the well prepared. I.e., How many miles per 1,000 feet of altitude loss do you get out of the plane you are flying? Is the wind helping or hurting you? (i.e., which way do I turn back to the runway and at what altitude?) Your life depends on it.

In a similar vein, the FAA & NTSB (echoed by NHQ/LG) pushes the concept of ‘Advanced Pre-Flight After Maintenance.’ For starters, we shouldn’t be moving aircraft out of major maintenance at night, or in instrument conditions. While we’ve covered this before, maintenance is ongoing. See atch 1 for FAA Safety Team Fact Sheet.

1b. NCWG Director of Operations (NCWG/DO) Comments: ‘Some people never go crazy. What truly horrible lives they must lead.’ To never experience the frustrations & exhilarations of our beloved CAP, to never see the very best, and sometimes less, of our volunteer humanity, & to never develop the determination and perseverance to progress through this aggravation and ecstasy? How utterly boring. ❤️ **Lt Col Matthew ‘Lobster’ Urbanek, USAF/Auxiliary**

1c. Oct Highlights: For the month, **NCWG is projected to fly ~255 hours; about 125 hours less** than Sept’s **379** hours. Not just our worse month in FY 23, it’s was a bad without weather or maintenance to blame. Fortunately, two U.S. Army AOB training missions in November should give NCWG a good jump for the quarter. N262CP and N741CP deployed to Daytona Beach, Fla for R&R, post Hurricane IAN support, but only N262CP returned. N741CP dual sprocket elevator trim actuator housing broke and is Jacksonville, Fla awaiting parts. NHQ ordered a new one (only \$3.3K) but it might literally be on a ‘slow boat from China.’

1d. Top Hour Flying Aircraft/Squadrons. Projections are: **NC-022/KBUY/N262CP - 45 hours, NC-048/KRDU/N726CP 31 hours, NC-160/KEWN/N98426 24 hours. NC-019/KAVL/N963CP & NC-121/KJQF/N716CP** crossed 20 hours, N179CP and N7360C cleared 15. Unfortunately, 5 aircraft were single digits (two of which on just one hand). See WMIRS Reports Form 18 reports to know how the squadrons did. **Remember, no unit is ‘owed an airplane.’**

1e. Top Hour Flying Individuals: The usual; Rosemond Malone, Dan Moore, Joseph Keller, Wendy Peters left seat; Ray Davis and other instructor pilots in the right.

1f. FY22 Standing: **NCWG finished #2 in CAP averaging 266.3 hours/aircraft. NCWG** finished only 3.9 hours/ aircraft behind the California Wing, and 11.1 hours ahead of third place, Utah Wing. So it’s almost like NCWG flew one more month than the rest of the MAR wings who did well with: DCWG 6th (246 Hrs), SCWG 7th, (236.4 hours), WVWG 12th

(212.3 hours), VAWG 14th (211.2 hours), 17th DEWG (203.3) and MDWG 20th, (192.8 hours). It was a real regional power showing. Info at: <https://www.caphq.gov/WMIRS/Utilization/FYRankingsByHours.aspx>

2. Maintenance Month in Review: KSUT again has maintenance capability (not a consolidated maintenance) facility. **Aeroworx, LLC** has rented the hangar we're used to bringing our aircraft. Good news for NC-170.

2a. Aircraft in Annuals: 3 airplanes had 100-hour inspections between two consolidated maintenance facilities.

N262CP/George: Needed some loose wires secured behind the instrument panel and the ignition switch tightened. Right tire and tube replaced. Reconnected fuel cap chains (Really? Pilots didn't see/fix that one?) Lubricated trim wheel and pulleys so at least they would make less noise in the cockpit. Removed propeller in order to replace the crankshaft seal. Re-installed the propeller so N262CP could go home to KBUY from KAVL on 4 Oct.

N908CP/Flo: Pilots complained of a wandering autopilot. Turns out it was shot and pulled out. Thus, aircrews can carry an extra two water bottles with the reduction in N908CP's empty weight. Flo also received the usual oil change and filter, spark plugs cleaned/gapped, 100-hour fuel line AD compliance (←NHQ/LG note), a new nose wheel tire, wheel bearings repacked and new brake pads. Flo went home to KILM on 14 Oct. **But none of us noticed the magnetos were nearly out of time, so N908CP will probably be parked at home station while its magnetos are sent off.**

N99885: Echo had her L-Tronics DF finding radio removed along with excess, unused antennas. That ends the NCWG era with L-Tronics radios in our fleet. It's also one of the last two, normal aspirating airplanes (remember carb heat) in NCWG's fleet. Echo returned to its new home at KJNX on Oct 26th.

2b. Other Maintenance Issues: NCWG fleet oil changes included: **N716CP & N179CP**. As mentioned, **N741CP** deployed to Florida for post Hurricane IAN photo missions but didn't return. '**Bleu**' apparently broke its elevator trim actuator. It might take a few weeks before N741CP is returned to NCWG. **N963CP** had an intermittent oil pressure gauge, **N99832** has its EGT fail, **N262CP**'s pilot P-T-T sometimes works, sometimes not, **N726CP**'s #4 cylinder has issues on magneto check; its pesky night light occasional blows the circuit breaker... but only during night flights. Several Flight Stream 510 cards have been ordered for our Garmin 650 & 750 equipped aircraft (see item 3d) below and for the FLIR aircraft -- Flight Stream 210 wireless connection devices). Lastly, N99885's GPS CDI Head died; R. I. P.



How awful are these cupholders?

2c. Official Cessna Coffee Cup Holders: Apparently, my e-Bay found, \$14 dual cup holders were '*too ghetto*' for our NCWG aircraft fleet. So instead of a GM produced, flat-bottomed, Velcro secured, plastic coffee cup holder, we got the Cessna version for \$200+ more (x 3). With the funding I tried to save, we could have bought nine, extended reach, tow bars to replace those short red ones. When your back is hurting from dragging a 2,500-pound Cessna across the ramp, at least take solace in the fact that your \$7, Mocha almond-soy milk blend (with Hazelnut) didn't spill. (Please note the use of Comic Sans -- the official font of sarcasm.)

2d. CAP Form 71s due last Month: Yep, they were. It's a compliance annual inspection item. Is yours done?

2e. AMRAD Training: NCWG aircrew and FROs had a great response to the missed tasking (and inspection item) of the AXIS AMRAD module(s). Turns out there was a report tracking issue where many of us who complemented the training weren't showing. **Capt Wendy 'Taz' Peters** took up the challenge and worked with wing members and NHQ to resolve the issue. Within two days, our completion numbers jumped five-fold. Kind of amazing that no other wing discovered this year-old problem. Please get it done this month if you haven't already. **Taz** will still ride herd on the issue. Starting in December, squadrons are authorized to T.P. your car each month you haven't completed it. Be sure

to get it done before your unit runs out of the new stuff. In the meantime, all of us who did complete the training can proudly proclaim, “I Am Rad.”

2f. Cold Weather Operations: That time of year again when the sun shines less. NHQ/LG pushed out some cold weather guidance which was re-broadcasted to NCWG aircrews and pilots last week. If you’re turning an engine over with its temperature <25 degrees, you’re destroying it. That’s Lycoming’s guidance. Pre-heat it or keep it warm.

3. Aviation Maintenance Support Information:

3a. GPS database cycle: Starts 3 Nov: Every 28 days; no news here, update in AMRAD as if anyone ever checks.

3b. Clean Machines: If your plane is getting really dirty then wash it. **NC-022/KBUY** did and also pulled 18 pounds of excess backage stuff out. That was on top of the 42# of supplies still there. **NC-143** washed **N7360C** which gets extra credit since that aircraft is larger than our others. Reminder; CAP requires aircraft washing twice a year, but those who get stuck on the mid-summer, mid-winter cycle, learn that doesn’t work. Try to get back on a Spring – Fall schedule. It shouldn’t take the AMO shaming you into what you (& AMRAD) should already be tracking.

3c. Quarterly NHQ AMO Meeting: On Thur, 13 Oct, NHQ held its now 8th quarterly update. I’ve capture some of the key slides in atch 2. But you really should check out all the slides as the first several are photos of the staff including the new Director of Logistics, ‘Mike’ Valdez and his fairly new deputy, Darrel Larson. Roger Kirkpatrick is the aircraft fleet manager, who surprisingly, still has all his hair. A [huge shout-out](#) goes to Mr. Kirkpatrick and his team of Jereme Watson, (and his predecessor Johnny Dean) Jennifer Bellflower, Gary Author, and Ryan Oyler. NCWG has only ~3% of the CAP aircraft fleet, and is but one of ~60 Wings and Regions, but we always got ‘Top Customer’ treatment. All the updates, slides and “Q & A’s” are online at: <https://www.gocivilairpatrol.com/members/cap-national-hq/logistics-mission-resources/aircraft-management/amo-resources>

3d. XM Weather – Are we Sirius? For G1000 aircraft, CAP has again purchased Sirius weather data. Per the above meeting briefing slides, on 22 Oct we forwarded our XM radio data id’s to NHQ for activation. Most aircraft already have the account established but **N726CP** was turned on. NHQ/LG is also providing Flight Stream 510 cards available for aircraft with GTN650s or GTN750s installed and those G1000 NXI aircraft that didn’t come from the factory with the 510 installed. For NCWG that includes: **N7360C, N908CP, N98426 and N262CP**. For those unaware, this gives Blue Tooth/WIFI capability in the cockpit. And NCWG will receive for N938CP & N963CP (our FLIR birds) as well.

3e. Lessons Learned: While not as insightful or prolific as the ‘Rumsfeld Rules,’ attachment 3 has some my take-aways that I hope CAP members and leadership take note. https://www.rumsfeld.com/rumsfeld_rules/Default.asp

4. Miscellaneous News:

Six years in Review – Fleet Changes: For starters, I was extremely fortunate to serve under then, Major Chris ‘Chihuahua’ Bailey who built the best operation and maintenance program in CAP over the past decade. Not just my words, but those from **NHQ/LG** who literally own the fleet. Love him or hate him (many of us do both), his incredible work and initiatives built an organization from 10 to 18 aircraft and a glider, during my time in CAP. Lt Col Bailey decided to step down as the Director Ops/Mx/Finance/Comm/Recruiter/Adviser and other roles and take a well-earned break, & I stepped up to his maintenance role. Fortunately, he was always there in the background, lurking, supporting and training me. Together, along with Lt Col Ray Davis and NCWG crew chiefs, we lived through:

N991CP, a 1997 C-172R (with an older paint scheme) was traded to **MDWG** for a future new airplane from the factory to be named later. That promised airplane turned out to be **N262CP**. Unfortunately, **N991CP** overran a short runway, collapsed the new gear and was sold off.

N358CP, a 2005, C-182/G1000, was pulled from the DEWG, as it mostly just sat on a ramp and deteriorated. **MER** took possession of the airplane. But regions only exist on paper, planes get parked in states and N358CP was based at

KBUY. Since MER didn't fly her much, nor have a crew chief, after a few months, she was transferred to NCWG for help. **N358CP** was named, '*Mesa*,' because while *she wasn't reborn from the ashes, like the Phoenix*, she was pretty close. When the engine came back from repair, MER directed we send the aircraft to Utah, where she is today, as the Rocky Mountain Region was in need of five airplanes. NCWG was promised another future factory airplane for our efforts. In 2022, NCWG was offered a new C-172/G1000, which we turned down. Already equipped with six C-172s, NCWG needs another C-182, because the useful load of the new C-172s isn't that useful and not supportive of all NCWG's missions; not just flying cadets. **MAR was surprised and amazed** we didn't take the bird in the hand, **and promised us a new C-182 when available.** Just a reminder to the new MAR leadership for new aircraft allocations.

N98426: This former Alaskan, 1998 C-172 came out of refurbishment in New Jersey and NHQ didn't have a place to put her at the moment. Since N727CP was coming out of the same shop (from the fuselage 'two step' repair) NCWG was told to bring her home and wait for further instructions. (Note: Being the top flying hours/aircraft wing in the country does have some benefits.) But despite the refurbishment, N98426 still pulled to the right due to a previous runway incident that involved fixing a bent wing. NCWG leadership wanted to name her something Alaskan, like Kodiak, or Denali. But since she was a good looking Alaskan older gal who pulled to the right, we named her '**Sarah**.'

N9930E: Thor was our 1985, two blade prop, C-182R who was used to tow gliders among other missions. Thor was one of 5 NCWG aircraft vulnerable to an FAA advisory directive but the only one to have wing spar support plate cracks. Being that N9930E was about a year away from needing a rebuilt engine and where CAP normally sells aircraft (6,000 hours), they made the right decision to sell it off. The ~\$10K repair was done here at KSUT by the new owners and now based up in Carlisle, Pa. During my 6-year time, this was the first & only time an airplane needed an annual after 12 months with only ~95 hours on it. COVID & Thor's basing near the glider location with a smaller pilot base were big factor on this. For Thor's 36-year, CAP career, we held a retirement ceremony including a 'missing man, taxi-by formation.' Enjoy Lt Col Jeff Farkas's three-minute video at: <https://www.youtube.com/watch?v=XXjzb-P3leA>

N437BA: NCWG's Blanik L-23 Glider. Our one horror story. After building a top glider program from scratch over the past ~seven years, the glider just came out of this year's annual, including new control surfaces, only to be destroyed by a thunderstorm. NHQ has many glider aircraft issues and is planning to combine several into one. NCWG doesn't have the volunteer base at this time, to support the glider program. To me, Glider Ops was NCWG's coolest program.

That's not to say we weren't lucky. Considering we fly ~4,000 hours each year, the exposure is high so our percentages are really small, here are some of the maintenance stories that stay in our memory.

N7360C Engine Casing: The engine needed to be pulled, send off and repaired. Upon return, 'Lola' had just completed her 10-hour 'cadet protection' burn off, when the region directed we send the airplane to Puerto Rico for hurricane support. We advised it was a bad idea, because the plane just had major engine work. This is one time, that 'FRO refusal' paid off. Two hours later, the airplane was grounded due to magneto issues. Had we not held our ground, N7360C may not be CAP's 4th oldest airplane, but rather a dive site in the Caribbean.

N963CP knocking sound: Our KAVL C-182 started developing a knocking sound which increased with RPM. Five months later, including two shops and then an engine rebuilding contractor, no problem was found. Only on re-installation did maintenance discover that some engine mount washers were missing. The 'Big Cajones' award is owned by **David Hartman**, NC-019, who flew N963CP from KAVL to KSUT with that noise (on an FAA Ferry Permit).

N819CP Prop Governor/Engine: A loose fitting caused a massive oil leak on startup. The subsequent engine inspection found some underlying crankshaft issues. It became of issue of 'who's bill is this' while the airplane was out of commission. 'Dixie' was down half a year. But since then, the aircraft got a paint job and looks stellar.

N262CP / N179CP broken nose landing (NLG) supports: Both aircraft had damage that could have collapsed the nose gear if not caught. N262CP's was just cracked, N179CP's was 'obliterated.' (See slide on NLG support Brackets.)

Equipment Installations: CAP/NCWG installed the following upgrades on our aircraft over the past few years. We were the first wing in the country to install ADS-B across all our aircraft. We installed VIRB mounts on 11 of 18 airplanes, Waldo and DAART on one airplane each, a transponder on our glider so others with ADS-B could see her, a Forward-Looking Infrared Radar (FLIR) on two aircraft, including FM radio upgrades, VIPER radios in several aircraft and eventually, the Aero-Not on a FLIR aircraft. Now, Bluetooth conductivity cards are being added several airplanes.

5. Thank you all for the support & taking the time to read this Riveting Reading. In attachment 4, I've tried to capture photos of the awesome people I got to work with during my time in CAP. Of course, I'll have missed several people, so apologizes up front to those omitted. All the Riveting Reading newsletters are available on the Wing website (NCWGCAP.org) under 'Members/Operations/Aircraft Maintenance.' If you're in the Southport (KSUT) area, know I always have cold drinks in the hangar.

- Stryker  R -

Martin Heller, Lt Col, CAP
NCWG Aircraft Maintenance Officer

4 Attachments

1. FAA's Advanced Pre-Flight After Maintenance FFAST Team factsheet
2. NHQ AMO Quarterly Meeting slide extract
3. Lessons Learned During my CAP tour
4. Photo Collage of CAP friends.

FAASTeam

Safer Skies Through Education



FAA
Aviation Safety

Advanced Preflight After Maintenance

The General Aviation Joint Steering Committee (GAJSC) and the National Transportation Safety Board (NTSB) have determined that a significant number of general aviation fatalities could be avoided if pilots were to conduct more thorough preflight inspections of aircraft that have just been returned to service. In-flight emergencies have been the direct result of maintenance personnel who have serviced or installed systems incorrectly.

Maintenance-related problems are one of the most deadly causes of accidents in general aviation. Contributing to this is a pilot's failure to identify maintenance discrepancies because of a lack of knowledge and improper techniques used during the preflight of the aircraft.

So What Can Pilots Do?

Conduct an Advanced Preflight that goes beyond the normal preflight checklist. Advanced preflight is a program that helps you become more aware of all the safety-related data on your aircraft, and focuses on a detailed approach to your preflight inspection, based on your aircraft's maintenance history. While this requires some time, consider developing an additional items checklist that can be used in conjunction with the aircraft's preflight checklist for all future

preflight inspections. It is a valuable tool whether you own, rent, or borrow an aircraft.

Put Yourself in the Right Mindset — assume that there is something wrong, even if you used the best mechanic. Mechanics typically do an excellent job, but if you assume that all is right, you'll miss catching any possible mistakes, worn items or improperly rigged items, or whatever else might be wrong. Always look over any part of the aircraft that has maintenance performed on it.

Use Your Senses, and a notepad, to write down anything you sense is not right. LISTEN to the airplane (not just the engine!). Do you SMELL

anything abnormal? Fuel? Oil? Does it vibrate more than usual (FEEL)? Do you TASTE (or smell for that matter) any of that acrid smoke that comes with burning electrical items? Step 10 to 15 feet back from the airplane. Does anything LOOK out of place? Be prepared to abort takeoff if something goes wrong or doesn't feel right.



Before Your First Flight After Maintenance:

- ✓ **Learn all you can about the maintenance that was performed.**

Discuss all work that was done with the mechanic. Ask what to look out and watch for during the first flight. Do not just accept that the work was done. Ask: What was touched, repaired, or replaced, and what was accomplished?



- ✓ **Don't assume the part(s) replaced are the only parts removed.**

Ask what was removed and/or disconnected to facilitate the work performed. Often disassembly needs to be done to get to the inoperative part. For example:

- ♦ Upholstery / seats, tracks, floors / emergency exits
- ♦ Interior and exterior access panels especially in hard-to-see places of the aircraft
- ♦ Yokes / control cables, linkages, and surfaces
- ♦ Equipment and appliances / wires and connectors
- ♦ Hydraulic / vacuum / brake / pitot and static / fuel lines

- ✓ **Pay attention to trim positions. Check for unimpeded flight control surface deflections. Make sure they go in the proper direction!**

- ✓ **Make sure all inspection panels are secure and their fasteners are tight.**

Inspect all control fasteners for missing cotter pins. Inspect locknuts, making sure the bolt or stud extends at least the full round or chamfer through the nut. Flat end bolts, studs, or screws should extend at least 1/32 inch through the nut. Check all visible bolts. If there's a hole in the bolt, it requires safety wire in it. See FAA Advisory Circular AC 43.13-1B for procedures.

- ✓ **Check fuel tank for water, sediment, and proper fuel grade.**

Use a sampler cup to drain a small quantity of fuel. Place it in front of a white (not blue) background to see what's in the fuel. Pull out the strainer drain knob for about four seconds to clear it of water or sediment.

- ✓ **After an oil change, always check the engine oil level to ensure it has the proper amount of oil.**
- ✓ **Always check your logbook and paperwork prior to flight to ensure the correct records have been entered.**

Check for proper log entries for the work performed and the return to service, or the aircraft isn't legal to fly. Always ensure you have your aircraft's correct documents (e.g., airworthiness certificate and registration) onboard.

- ✓ **If you see a warning tag / sign on the aircraft, or on the sign-out or status board, DO NOT FLY THE AIRCRAFT! Check with the maintenance facility prior to taking the aircraft.**
- ✓ **Participate in, or observe your mechanic perform, an annual or 100 hour inspection.**

It's a great way to learn about your aircraft's systems, components, and any areas prone to failure or weakness.

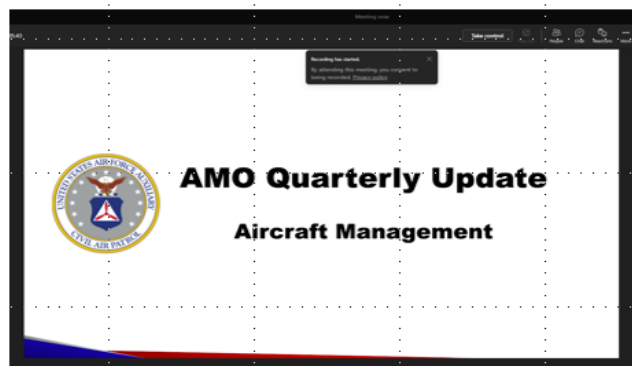
Resources

- NTSB Safety Alert — Advanced Preflight After Maintenance:
<https://go.usa.gov/cK7Py>
- FAA's Advanced Preflight Pamphlet:
<https://go.usa.gov/xVy44>
- "Advanced Preflight," FAA Safety Briefing, Mar/Apr 2012:
<https://go.usa.gov/cK7ma>



Attachment 2
Nov 2022 NCWG Riveting Reading
NHQ/LG Quarterly AMO Update (selected slides)

<https://www.gocivilairpatrol.com/members/cap-national-hq/logistics-mission-resources/aircraft-management/amo-resources>



Sirius XM Weather

- Must have a GDL 69 or GDL 69A installed
- Must provide me with the Data Radio ID
- On the MFD, navigate to the XM info page
- [Click here for refresh signal](#)
- royleer@capnhq.gov

Volunteers Serving America's Communities, Saving Lives, and Shaping Futures.

FY22 Aircraft Buy

- 2 – T206H
- 4 – T182T
- 9 – 182T
- 21 – 172S
- 36

Equipped with G1000 NXI & Flight Stream 510

Volunteers Serving America's Communities, Saving Lives, and Shaping Futures.

Flight Integration Release/Maintenance (FIRM)

- WMIRS Flight Release update
- Prevents release of aircraft with overdue Mx
- Does not allow release of grounded aircraft
- Provides notification for Sortie Scheduling
- Provides Aircraft Mx Report in WMIRS
- Sends monthly reminders of upcoming MX
- Based off of AMRAD Acft Mx Data
- Launched the last week in August

Volunteers Serving America's Communities, Saving Lives, and Shaping Futures.

FLY SAFE
General Aviation Safety Enhancement Topics

An Advanced Preflight After Maintenance Can Prevent Accidents.

GAUSC
GENERAL AVIATION USER SAFETY COMMITTEE

Volunteers Serving America's Communities, Saving Lives, and Shaping Futures.

Advanced Preflight After Mx

- Set our aircrews up for success
- Mx pick-ups should be done in Day VFR conditions only
- Assume something is wrong
- Provide aircrews a list of all work
- Shop should brief them on work actually performed
- Never assume the part(s) replaced were the only parts removed
- Pay attention to trim positions
- Check all panels for security
- Always check the oil level
- Check the logbook entry
- If you see a warning tag / sign; DO NOT FLY THE AIRCRAFT!

Volunteers Serving America's Communities, Saving Lives, and Shaping Futures.



Mx Tip of the Quarter

NLG Support Brackets

- Multiple instances over the last several years
- Cannot be seen during a normal preflight
- Watch for abnormal indications during taxi
- Abnormal in-flight handling
- Detailed in DO Critical Read 6-6-2018
- If any of these occur - Ground the aircraft!
- Have a hard landing inspection conducted

Volunteers Serving America's Communities, Saving Lives, and Shaping Futures.

NLG – Nosewheel Landing Gear



Summary

- LG Intros
- Sirius XM Radio IDs
- FY 22 Aircraft Buy
- Introducing FIRM
- Advanced Preflights
- AD2015-19-07 (Lycoming Fuel Line Insp)
- Parts/Component Challenges
- Mx Tip of the Quarter

Volunteers Serving America's Communities, Saving Lives, and Shaping Futures.

Attachment 3
Nov 2022 NCWG Riveting Reading
Lessons Learned with NCWG CAP Over the Past Nine Years.

Leadership: All senior members are leaders, regardless of rank. And we're all in the same volunteer boat. You need to pick up an oar (responsible) and row. Otherwise, you are dead weight that others have to carry. Being an aircrew isn't a job; it's a skill. Take some of the workload off your commander and manage something, so he/she can do their jobs, not everybody's. Your squadron shouldn't have an airplane if your commander has to be the crew chief too.

Remember CAP is mostly a volunteer organization. The Experimental Aircraft Association, (EAA) also a volunteer organization, tried to 'run it like a business' and hired Ron Hightower as the CEO. While a brilliant business leader, he nearly wrecked the organization. EAA had to change leaders & hired back many of those individuals who were let go, or voted with their feet. That's just paid staff; many volunteers, some with decades of support, called in quits for good.

If your only tool is a hammer, then every problem gets treated like a nail. As the USAF-Aux, we may wear the uniform, share the values and follow similar regulations. But not every issue should be treated with the 'default' 'That's the way it's done in the USAF.' We accepted a lot of extra work in the USAF because we had to. Not the same with a volunteer organization – so value the volunteers' time when creating additional workload.

Call Fouls: Now contrary to above, many CAP members have military service and often careers. We embody the military core concepts. It's exceptionally demoralizing when we see 'careerist leaders who don't take care of their people, or 'rules don't apply to us' mentality. Fortunately, most of our leadership is nothing short of awesome, with the time they donate, sacrifices they make and challenges they have. Remember, we're all learning.

People: CAP's greatest assets; the masses that get the missions done. And probably our most important mission is training cadets to be good and productive citizens. But when most members leave, they say, 'Never again.' Find out why. It's hard to recruit new members if they talk to departing members who are very bitter.

Just because we wear the uniform, doesn't mean we play in all the 'games.' Many dedicated CAP members have real jobs, which they'll take leave to go on a real mission search. But they won't leave their company in a lurch, or take a financial cost, just to satisfy an 'Emergency Services' response test. It doesn't make them less of a great asset.

Rank has little privilege: Mostly it shows that one has more CAP continuity and achieved more milestones. But CAP has many 60+ year-old 2nd Lieutenants that were the captains of their industry and bring along talent and drive.

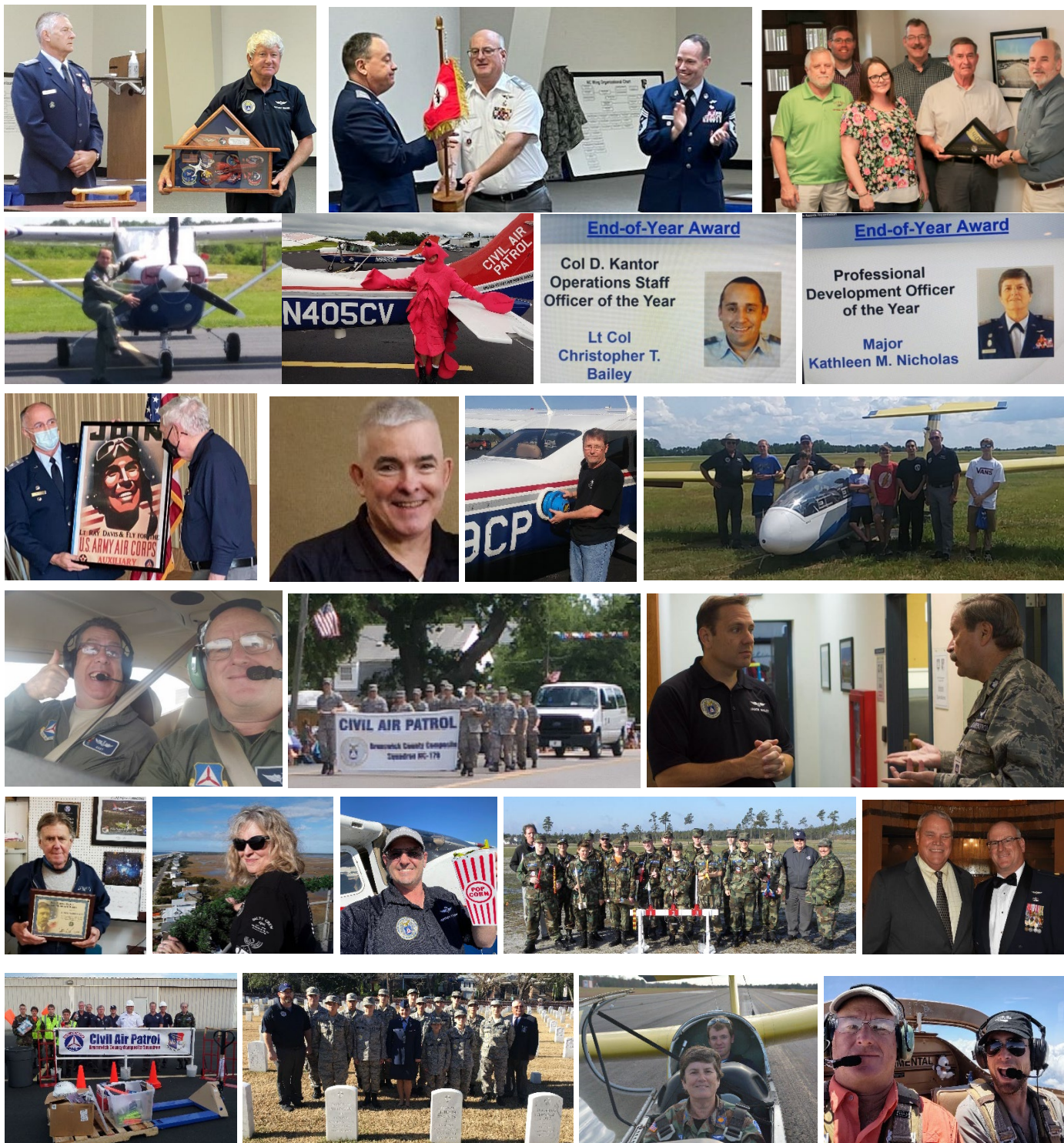
Not Flying: One of the great aspects of CAP is that we can always 'just say no' to flying. We never force anyone into an airplane. That said, if your unit is consistently unreliable to support the missions or training, there are plenty of other squadrons ready to get your airplane.

Tired of Changing Tires. While we want to have people feel ownership of the airplane, we also need to instill that it's not their airplane to risk. We've gone through too many tires by pilots trying to make a taxiway turn off. Seems more of the occurrences are at tower-controlled airports. For all the work our pilots do, we have avoided handing them the \$300+ bills they created. Learn to tell the tower 'Unable' if needed.

Pay attention to Lessons Learned: Secure the step ladder, watch out for weight gain in the baggage area, don't use the 'fuel step' nor taxi over tie-down ropes, <https://www.youtube.com/watch?v=HFRnX7ZVGf0>, wear clean underwear, and if I've never mentioned it before, open a AMRAD discrepancy before the airplanes go to maintenance.

Attachment 4

Nov 2022 NCWG Riveting Reading
 NCWG Leadership, Squadron, Operations and Maintenance Team Friends*





Base	Unit	Crew Chief	Asst
AVL	NC-019	Ray Davis	Don Briola
BUY	NC-022	Jeremy Browner	Malone Rosemond
FAY	NC-171	Paul VanWagner	Ron Ascher
JNX	NC-143	Dan Moore	Warren King
INT	NC-082	Bill Hawke	Joe Miller
JQF	NC-121	Randy Seals	Tony Palmer
ECG	NC-305	Doug Hansen	Malcolm Lecompte
EWN	NC-160	Adam Paige	Brian Mouat
ILM	NC-023	Sean Marra	John Phillips
LHZ	NC-145	Chris Bailey	Jonathan Forney
SVH	NC-162	Todd Milstead	Jeff Roseberry
RDU	NC-048	Don Williams	Jonathan Toppins
SUT	NC-170	John Matter	Karl Noffke
RWI	NC-057	David Hopewell	Dion Viventi
GLIDER	NC-145	Tim Suttles	

